OMT 1100

UNIVERSAL DEVICE FOR REMOTE MEASUREMENT

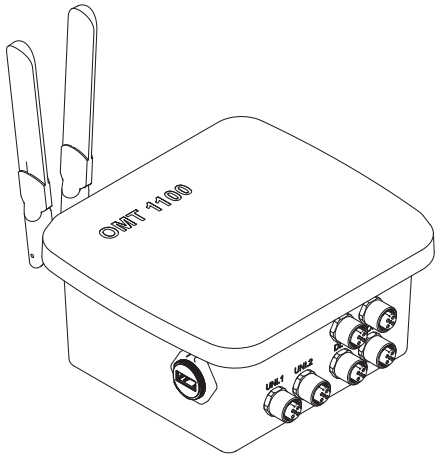
Outstanding measurement value...

OMT 1100

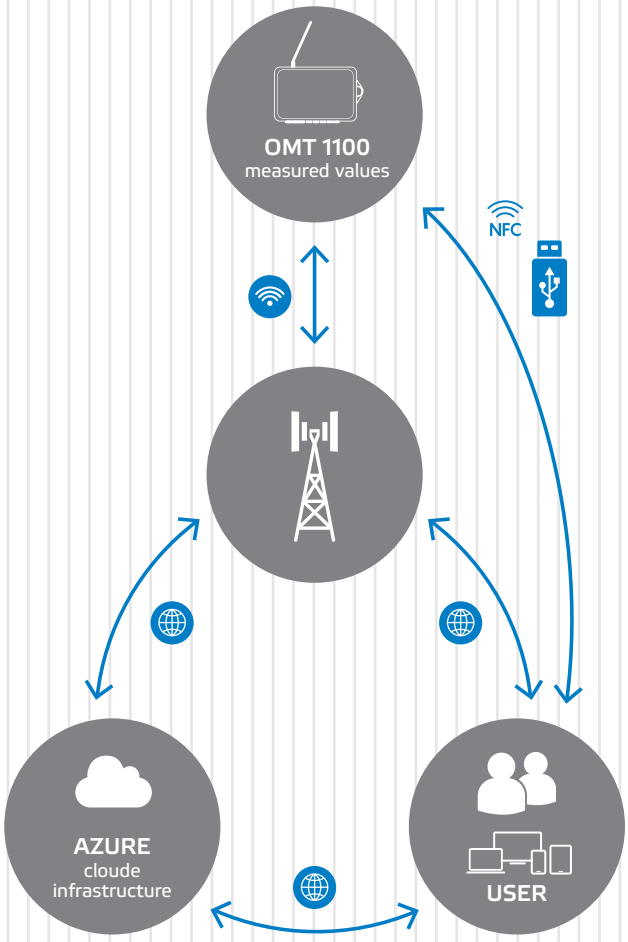
DEVICE FOR REMOTE MEASUREMENT

- **ANALOG AND DIGITAL INPUTS**
- **DIGITAL OUTPUTS**
- **INTERNAL MEMORY 4 GB**
- **WIRELESS DATA TRANSFER NB-IOT**
- **DATA STORAGE INTO A CLOUD**

In the current era of of digitization and Internet of Things (IoT) **OMT 1010** brings you a simple way to improve remote monitoring and data collection in a wide range of industries.



Communication diagram

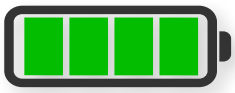


Samples of use

With appropriate sensors, OMT 1100 can be used in many different areas:

- **Industrial Monitoring and Control** (Industrial IoT)
  OMT 1100 can be used to monitor temperature, humidity, pressure, flow, levels of liquids, etc. in industrial applications. Collected data can be used for process optimization and failure prevention.
- **Energy consumption measurement**
  Metering devices can be installed in buildings or facilities to monitor the consumption of electricity, water, gas,etc. Their data can be used to effectively manage resources and optimize energy consumption.
- **Environmental evaluation**
  OMT 1100 can also be used outdoors in forests, waterways, city centers or any other environment. Data obtained by is used to protect and improve our living space.
- **Agriculture and irrigation**
  By monitoring and collecting data on soil moisture, temperature, pH level, etc. in agricultural areas, it is possible to optimize irrigation, fertilization, harvest planning, make better use of agricultural land and predict trends
- **Smart Cities**
  Appropriately deployed OMT 1100 devices in various smart city applications including traffic monitoring, parking, lighting, waste collection etc. assist in bettering the management of urban resources and infrastructure.

Battery capacity up to 1 year



Visualization

- **web application**: Device management with intuitive setting, easy to understand display of data, monitoring of trends and sending of set alerts and reports.
- **User's own system:** OMT 1100 can be integrated to the user's computerised systems via REST API.
  Data can be uploaded onto USB flash in CSV format.

Setup and functions

Inputs
- up to 2 universal analog inputs
- up to 4 digital inputs

Outputs
- up to 4 with open collector

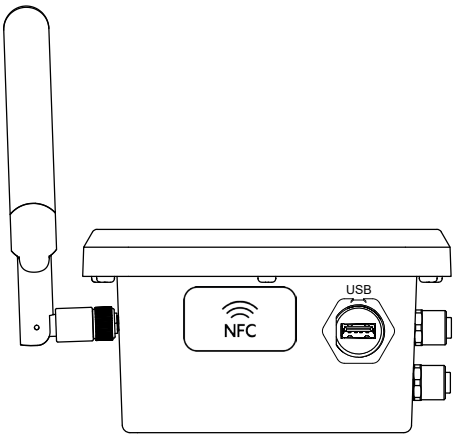
Wireless Metter bus (wM-Bus)
- for the creation of Advanced Metering Infrastructure (AMI)
- connection of sensors supporting wM-Bus

Measured data
- storage into internal memory eMMC 4GB
- transfer to a USB flash drive with NFC login
- mobile network transmission and NB-IoT support

Power supply
- easy to replace battery with 13 Ah capacity
- external

Visualization of data
- web application on MS Azure platform
- own system with REST API technology

Thanks to its versatility, variability and low power consumption, the OMT 1100 can be used in an endless number of applications. Its use brings new possibilities and improvements in remote measurement even in remote locations where there is no power grid.



TECHNICAL DATA

UNIVERSAL ANALOG INPUT [UNI]

No. of input		up to 2	
Type		12 bit ΔΣ ADC	
Rate		1...10 measurements/s	
Accuracy		±0,3 % of FS ±0,5 % of FS	PM-I
DC	Range	0...60 mV > 10 MΩ 0...450 mV > 10 MΩ 0...2,8 V > 10 MΩ 0...20 V > 10 MΩ 0...30 V > 10 MΩ	
PM	Range	0...20 mA < 200 mV 4...20 mA < 200 mV 0...10 V 1 MΩ	
OHM	Range	0...390 Ω 0...3900 Ω	
	Connect.	2-wire	
RTD	Range	Pt 100/1 000, 3 851 ppm/°C -50°...450°C Pt 100, 3 920 ppm/°C -50°...450°C	
	Connect.	2-wire	
Ni	Range	Ni 1 000 5 000 ppm/°C -50°...250°C Ni 1 000 6 180 ppm/°C -200°...250°C	
	Connect.	2-wire	
UC	Range	5...24 V, isolated PNP/NPN/contact (10 kHz)	

DIGITAL INPUT [DI]

No. of input		up to 4
Rate		100 kHz
DI	Range	5...24 V, isolated

DIGITAL OUTPUT [DO]

No. of output	up to 4
Type	digital, isolated
Output	open collector (40 VDC/500 mA)

COMMUNICATION

Module	Multi-Band NB-IoT Uplink: 159Kbps Downlink: 127Kbps
Protocol	TCP/HTTP(s)/SSL
Anténa	with SMA connection

MEASURED DATA

Storage	Internal memory eMMC 4GB
Transmission	mobile network LTE CAT NB2 (NB-IoT); flash USB memory data upload conditioned by NFC code

POWER SUPPLY

Internal	Replaceable lithium battery „D" - 3,6 V/13 Ah
External	5...30 Vdc/1 A It is necessary to power the connected sensors!

MECHANICAL PROPERTIES

Material	ASA UL94HB, UV-resistant
Dimensions	150 x 150 x 75 mm
Mounting	wall mountable

OPERATING CONDITIONS

Connection	connectors M12
Operating temperature	-20... 60°C
Storage temperature	-20... 60°C
Operating humidity	< 95 % r.v., non-condensing
Protection	IP66
EMC	EN 61326-1 (Industrial area)
RoHS	EN IEC 63000 : 2018

ORDER CODE

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Input - universal analog	none	**0**
	1 input	**1**
	2 inputs	**2**
Input - digital	žádný	**0**
	2 inputs	**1**
	4 inputs	**2**
Input - digital	none	**0**
	2x open collector	**1**
	4x open collector	**2**
Wireless Metter bus (wM-Bus)	no	**0**
	yes	**1**
Lithium battery	no	**0**
	yes	**1**
Mounting accessory	none	**0**
	wall holder	**1**
	pipe fastening set	**2**
Specification	standard	**00**

ORBIT MERRET, spol. s r.o.
Vodnanská 675/30
198 00 Prague 9
+420 - 281 040 200 info@orbitmerret.eu
www.orbitmerret.eu